



Cyclops

by Arya Akhavan (August 2012)

Angles for R.I. = 1.540

91 + 16 girdles = 107 facets

8-fold, mirror-image symmetry

96 index

L/W = 1.259 T/W = 0.564 U/W = 0.413

P/W = 0.632 C/W = 0.224

Vol./W³ = 0.460

PAVILION

P1	42.50°	96-06-12-18-24-30-36-42-48-54-60-66-72-78-84-90	Cut to centrepoint.
G1	90.00°	96-48	Set stone width.
G2	90.00°	02-46-50-94	Meet P1, G1
G3	90.00°	04-44-52-92	Meet P1, G2
G4	90.00°	22-26-70-74	Meet P1, G3
G5	90.00°	24-72	Meet P1, G4
P2	62.26°	04-44-52-92	Meet P1, G3, G4
P3	63.52°	02-46-50-94	Meet G2, G3, P3; P1, P2
P4	63.92°	96-48	Meet G1, G2, P3; P1, P3
P5	59.34°	22-26-70-74	Meet P1, G3, G4, P2
P6	59.77°	24-72	Meet G4, G5, P5; P1, P5
P7	41.00°	03-09-15-21-27-33-39-45-51-57-63-69-75-81-87-93	Meet P1, P3, P4 (only 4 facets meet) (cut new centrepoint)

CROWN

C1	42.04°	04-44-52-92
C2	42.04°	02-46-50-94
C3	42.04°	96-48
C4	42.04°	22-26-70-74
C5	41.38°	24-72
C6	27.30°	14-34-62-82
C7	40.01°	01-47-49-95
C8	40.01°	23-25-71-73
C9	35.22°	96-48
C10	23.65°	16-32-64-80
C11	24.17°	03-45-51-93
C12	25.05°	19-29-67-77
T	0.00°	Table

Set girdle width.
Level girdle.
Level girdle.
Level girdle.
Level girdle.
Meet G3, G4, C1, C4
Meet G1, G2, C2, C3
Meet G4, G5, C4, C5
Meet C3, C7; C1, C2, C6, C7 ("cluster")
Meet at cluster.
Meet at cluster.
Meet C5, C8; C4, C6, C8, C10
Meet C9, C11; C10, C12

This design, with its many facets, is designed for large clear quartz. It has surprisingly good light return for its L/W ratio, and has amazing tilt brightness. Be careful! This design has multiple sets of codependent meetpoints (areas where, within one step, a single facet hits multiple meetpoints).

Suggested size = 20+ mm

C:\Program Files (x86)\GemCAD\Designs (Mine)\Cyclops.gem